

CLAIMS

What is claimed is:

1. A home gateway for providing QoS to home LAN devices on a home network having a non-QoS capable device, the gateway comprising:
a modem operable to bridge traffic between a home LAN of the home network and a WAN cable network; and
a portal service interface connected to the modem, the interface adapted to operate as a proxy for QoS reservations associated with the non-QoS capable device and data communications traffic between the non-QoS capable device and other home LAN devices on the home network.
2. The home gateway of claim 1, wherein the portal service interface is adapted to make requests for the non-QoS capable home LAN device operating as a client by obtaining a set of QoS requirements of the client and inputting such QoS requirements into the gateway for selectively transmitting or receiving data, based on the QoS needs of the non-QoS capable home LAN device on the home network.
3. The home gateway of claim 2, wherein the portal service interface is further adapted to obtain the QoS requirements of the client and communicate such QoS requirements to the home LAN thru the modem, thereby allowing the gateway to selectively control the local transmissions of the data originating from the gateway along with a QoS or non-QoS capable home LAN device on the home network to coordinate the QoS needs of all the home LAN devices on the home network.
4. The home gateway of claim 1, wherein the portal service interface comprises at least one of hardware, firmware and software.

5. The home gateway of claim 1, wherein the portal service interface comprises a web browser operable to request, facilitate an input and determine the QoS requirements of the non-QoS capable device on the home network based on the input.

6. The home gateway of claim 5, wherein the web browser comprises an HTTP protocol to request, input and determine the QoS requirements of the non-QoS capable device on the home network.

7. The home gateway of claim 6, wherein the HTTP protocol is further operable to request, facilitate a manual input associated with characteristics of the home LAN device, and determine the QoS requirements of the LAN device on the home network based on the manual input, wherein the determination is employed to establish a connection between the devices on the home LAN, and to manage the exchange of information between the devices based on the QoS needs of the devices.

8. The home gateway of claim 1, wherein the portal service interface is further operable to communicate the QoS needs of the non-QoS capable home LAN device to the home network using an RSVP reservation protocol.

9. The home gateway of claim 1, wherein the home network comprises multiple LAN segments.

10. The home gateway of claim 9, wherein the multiple LAN segments each comprise a QoS or non-QoS capable home LAN device.

11. The home gateway of claim 10, wherein the QoS capable home LAN device is CableHome compliant and the non-QoS capable home LAN device is non-CableHome compliant, respectively.

12. The home gateway of claim 1, wherein the home LAN device comprises customer premises equipment.
13. The home gateway of claim 1, wherein the modem is adapted to bridge traffic between multiple LAN segments of the home network.
14. The home gateway of claim 1, wherein the modem is one of a cable modem and a DSL modem.
15. The home gateway of claim 1, wherein the portal service interface further comprises a traffic monitoring system operable to automatically determine QoS requirements of the non-QoS home LAN device coupled thereto.
16. The home gateway of claim 15, wherein the traffic monitoring system is further operable to automatically establish a connection between the devices on the home LAN, and to manage the exchange of information between the devices based on the QoS needs of the device.
17. A home gateway for providing QoS to home LAN devices on a home network having a non-QoS capable device, the gateway comprising:
a portal service hardware unit operably coupled to a modem to bridge traffic between a home LAN of the home network and a WAN cable network; and
a portal service interface connected to the portal service hardware unit, the interface adapted to operate as a proxy for QoS reservations associated with the non-QoS capable device and data communications traffic between the non-QoS capable device and other home LAN devices on the home network.
18. The home gateway of claim 17, wherein the portal service interface is further adapted to make requests for the non-QoS capable home LAN device as a client device, and input and obtain a set of QoS requirements of the non-QoS capable device into the gateway for selectively transmitting or receiving the

data, based on the QoS needs of the non-QoS capable home LAN device on the home network.

19. The home gateway of claim 17, wherein the portal service interface is further adapted to obtain the QoS requirements of the non-QoS capable device and communicate such QoS requirements to the home LAN thru the modem, thereby allowing the gateway to selectively control the local transmissions of the data originating from the gateway along with a QoS or non-QoS capable home LAN device on the home network to coordinate the QoS needs of all the home LAN devices on the home network.

20. The home gateway of claim 17, wherein the portal service interface comprises at least one of hardware, firmware and software.

21. The home gateway of claim 17, wherein the portal service interface comprises a web browser operable to request, facilitate an input, and determine the QoS requirements of the non-QoS capable device on the home network based on the input.

22. The home gateway of claim 21, wherein the web browser comprises an HTTP protocol to request, input and determine the QoS requirements of the non-QoS capable device on the home network.

23. The home gateway of claim 22, wherein the HTTP protocol is further operable to request, manually input and determine the QoS requirements of the non-QoS capable device on the home network, to establish a connection between the devices on the home LAN, and to manage the exchange of information between the devices based on the QoS needs of the devices.

24. The home gateway of claim 17, wherein the portal service interface is further operable to communicate the QoS needs of the non-QoS capable home LAN device to the home network using an RSVP protocol.

25. The home gateway of claim 17, wherein the home network comprises multiple LAN segments.

26. The home gateway of claim 25, wherein the multiple LAN segments each comprises a QoS or non-QoS capable home LAN device.

27. The home gateway of claim 26, wherein the QoS capable home LAN device is CableHome compliant and the non-QoS capable home LAN device is non-CableHome compliant, respectively.

28. The home gateway of claim 17, wherein the home LAN device comprises customer premises equipment.

29. The home gateway of claim 17, wherein the modem is one of a cable modem and a DSL modem.